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Installation for etching substrates by high-density plasmas comprises a phase delay line causing the supply voltages at both ends of the inductively coupled plasma coil to be in counter-phase with one another

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Abstract (Basic): DE 19900179 C1

NOVELTY - The first (32) and second (31) voltage supply points are joined by means of a phase delay line (30) in such a way that the high-frequency alternating voltages at both ends (20', 21') of the ICP (inductively coupled plasma) coil (6) are at least approximately in counter-phase with one another.

USE - For etching of semiconductor wafers, for example.

ADVANTAGE - Uniformity of the etching rates over the substrate surface is improved.

DESCRIPTION OF DRAWING(S) - The drawing shows a circuit variant for voltage supply to the ICP coil of the proposed installation.

ICP coil (6)

Plasma (8)

Phase delay line (30)

Voltage supply points (31, 32)

pp; 10 DwgNo 5/5

Title Terms: INSTALLATION; ETCH; SUBSTRATE; HIGH; DENSITY; PLASMA; COMPRISE
; PHASE; DELAY; LINE; CAUSE; SUPPLY; VOLTAGE; END; INDUCTIVE; COUPLE;
PLASMA; COIL; COUNTER; PHASE; ONE

Derwent Class: L03; M14; V05

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H01L-021/3065

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